WMO - World Weather Research Program
Storms, floods

ICSU-WMO-IOC/Unesco - World Climate Research Program
Climate extremes

Socio-Economic Research Activities

- **UNESCO-IOC-Tsunami risk**

ICSU
- **Regional Programs**
- **IUGG-ENHANS**
- **CODATA**

IRDR

ICSU-ISSC-UNU
International Human Dimensions Program
Integrated Risk Governance
Land-Ocean Interactions in Coastal Zone

- **ICL-Landslide risk**
- **GEM-Earthquake risk assessment**
- **ICG-Earthquake/Landslide risk**
- **UNISDR-Drought risk**
- **IFI-Flood risk**
- **ICPAC-Climate risk**
- **RFMC-Wildland fire risk**

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START
global change SysTem for Analysis, Research and Training

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FORIN

Int'l Center of Excellence

RIA

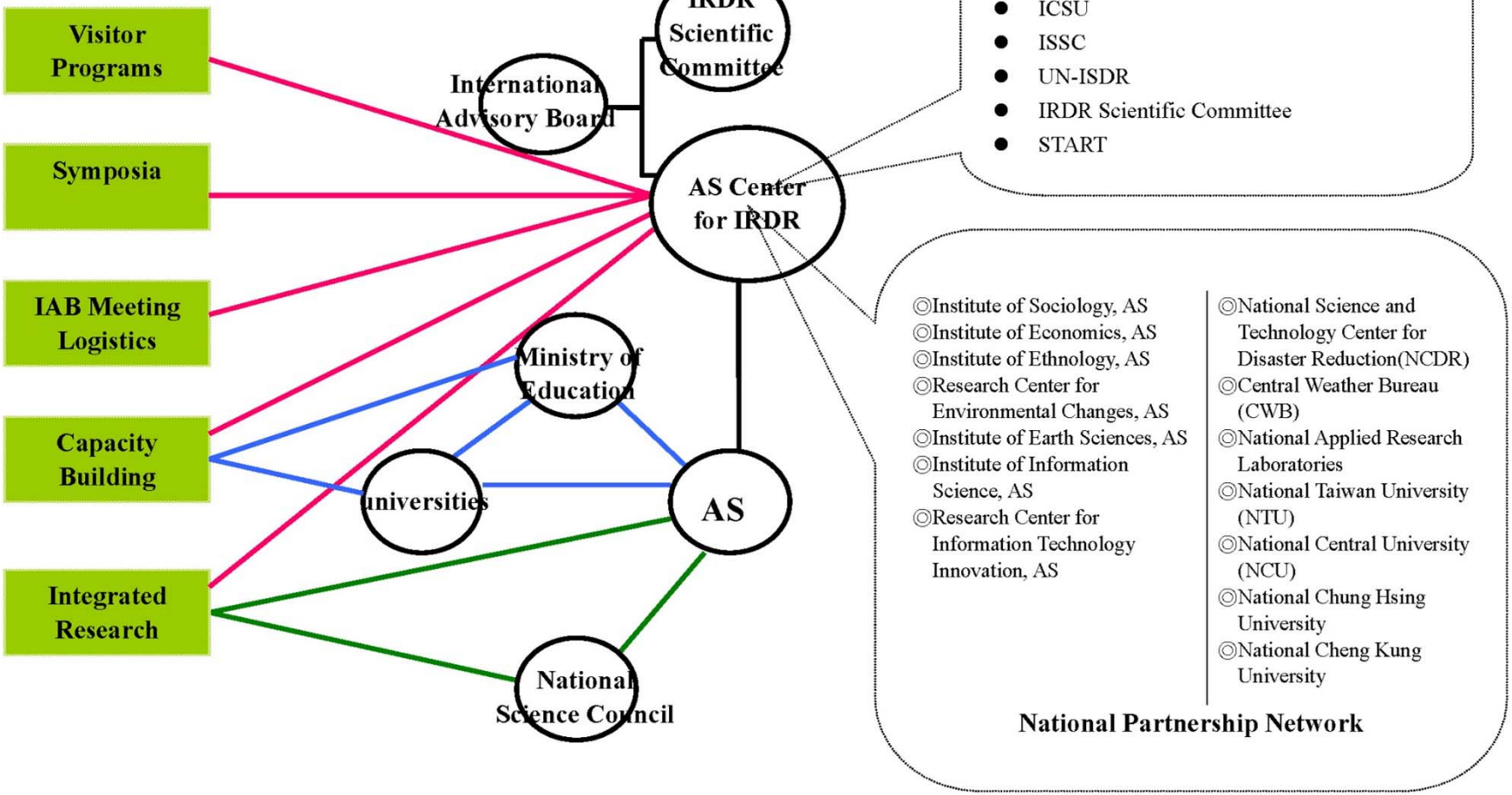
Disaster Loss Data

GA-IRDR

IRDR International Centre of Excellence

- **Agreement between Academia Sinica, located in Taipei and the International Council for Science**
- **The Centre shall serve as a global platform for conducting disaster risk reduction research, using an integrated multi-disciplinary approach from the perspective of both of the natural and social sciences.**
- **exchange of scholars to between research institutions, the exchange of ideas and information, collaborative research, and education and training.**
- **The Centre will have both domestic and international components. The domestic component will consist of a strong cadre of disaster risk reduction academics and researchers from universities, academies of science, institutes and centres within the host country. The international component will consist of short- and longer-term (6-12 month) visiting scientists from developed and developing countries and support to host workshops, colloquia and scientific meetings that bring together scientists on, for example, forensic investigations.**

Framework for the Operation of AS Center for IRDR



Member List for IAB of IRDR ICoE

Dr. Gordon McBean

Dr. Hassan Virji
Executive Director of START
International START Secretariat

Dr. Kuniyoshi Takeuchi
Director of International Centre for Water Hazard Risk Management

Dr. Mohd. Nordin Hasan
Director of ICSU Regional Office for Asia and the Pacific

President Dr. Wen-Hwa Chen
National Applied Research Laboratories

President Dr. Wei-Ling Chiang
National Central University

Chairman Dr. Ching-Yen Tsay
Industrial Technology Research Institute

Goal

- Serve as an international platform for conducting integrated research on disaster risk from both the natural and social science perspectives

- Establish a partnership network of disaster reduction research within Taiwan as well as international scientific community

Programs

- Visitor Program
  - Host short- and long-term visiting scientists
- Symposia
  - Organize workshops and scientific meetings
- Integrated Research Programs
  - Conduct integrated research

Programs

- Capacity Building
  - Cooperate with International organizations, esp. START
- IAB Meeting
  - Call IAB meetings and consult with Board members in regard to scientific issues

IRDR

EAST-WEST CENTER

START

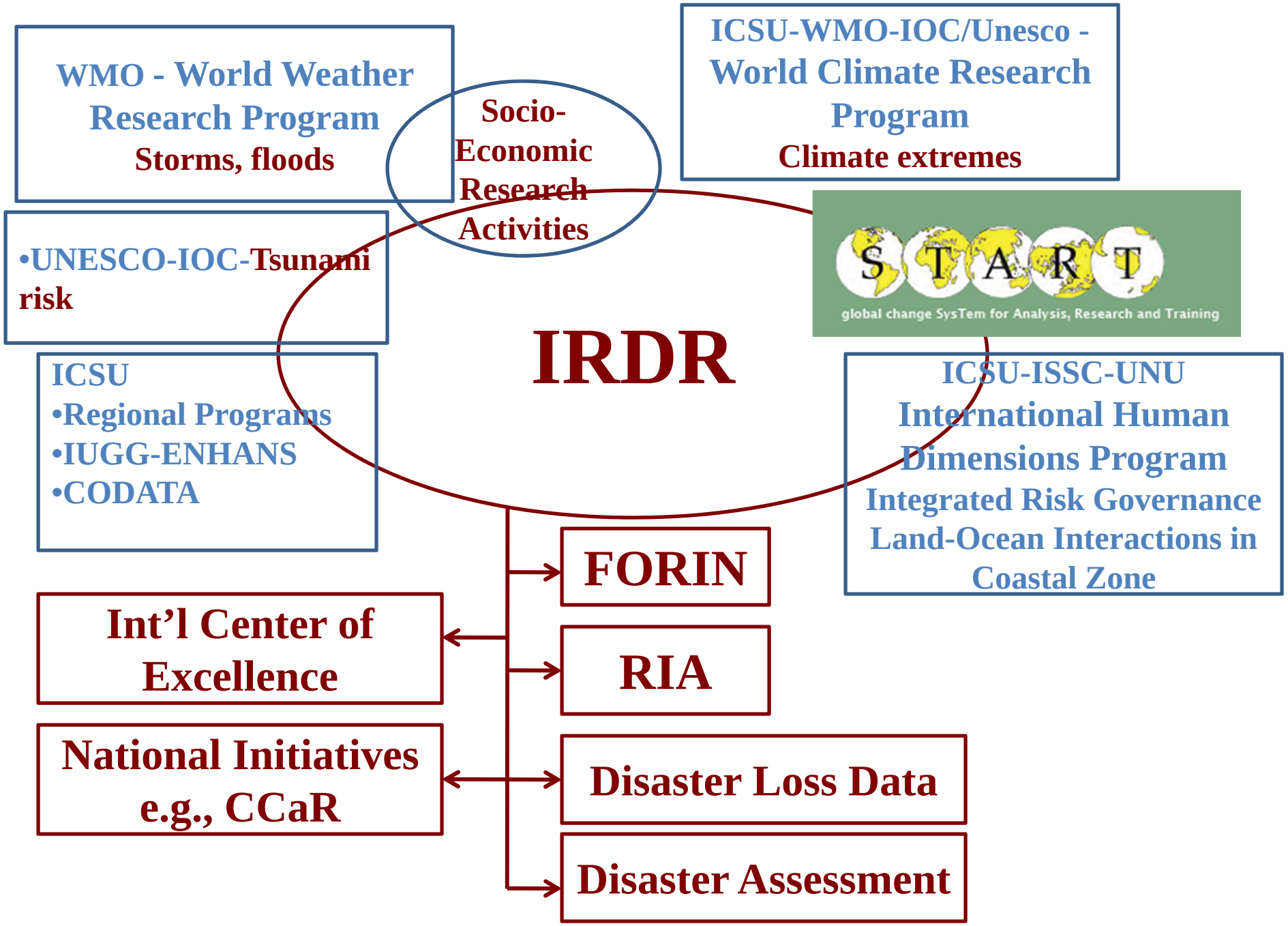
global change SysTem for Analysis, Research & Training

CITIES AT RISK CONFERENCE II

- **April 11-13, 2011**
- **Conference - key themes:**
- **(i) Knowledge base for Risk Characterization and Communication;**
- **(ii) Assessing Risk and Vulnerabilities;**
- **(iii) Developing Urban Adaptation Strategies;**
- **(iv) Adaptation Measures and Practices.**
- **Outputs**
- **Monograph**
- **A multi-authored review paper for a journal**
- **Outcomes**
- **consolidated network of city-based teams working on CAR issues**
- **number of follow-on actions/activities (e.g., CCAR/IDRC; CAR/USAID; other, such as ICE/IRDR?) and identification of a capacity building**
- **research effort at ICE/IRDR**

ICoE Programs

- Taipei centre
  - $300k per year
    - 2 workshops – per year
    - Senior visiting scientists + capacity building, young scientists
    - Links to: FORIN, RIA, social governance, open information systems for disaster management
    - Intersections of hazards and major technologies
- New ICoE
  - Where, when, model, process ?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RIA
National Initiatives e.g., CCaR
Disaster Loss Data
Disaster Assessment

Coastal Cities at Risk (CCaR): Building Adaptive Capacity for Managing Climate Change in Coastal Megacities

Principal Investigators

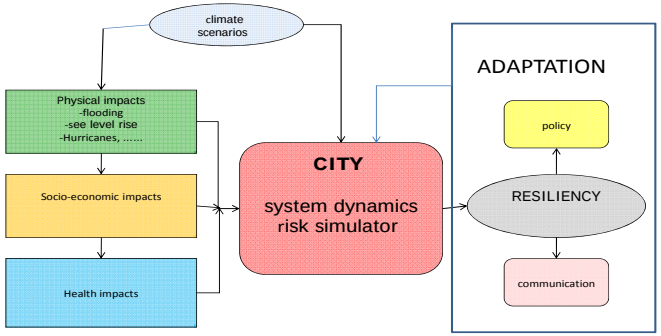
- Professor Anond Snidvongs, Chulalongkorn University and Southeast Asia START Regional Research Center (SEA-START)
- Professor Gordon McBean, CM, FRSC, The University of Western Ontario, London, Canada

Objectives

- A. Advance knowledge of climate change adaptation and disaster risk reduction:
- A1. Characterize climate-related hazards, vulnerability and risk;
- A2. Understand decision making processes in governance and society; and
- A3. Define, qualify and quantify the relationships between climate impacts, adaptation strategies and socio-economic implications.
- B. Develop strategies and methodologies for climate change adaptation:
- B1. Integrate adaptation and disaster risk reduction strategies and knowledge-based actions; and
- B2. Construct interdisciplinary simulation models to develop, test and validate these knowledge-based actions.
- C. Enhance practitioner and academic capacity and transfer knowledge:
- C1. Increase the numbers of highly-qualified people in Canada and abroad by mobilizing, exchanging, and translating knowledge; and
- C2. Transfer knowledge and capacity to a broad selection of communities and situations through workshops, effective communications, and parallel and follow-on projects with partners.

- **Theme 1 - Characterization of vulnerability and risk** – personal, health, economic; and response strategies: climate change adaptation, resilience, insurance – theme leaders: Adelekan and Davies with Lannigan, Loyzaga, Mortsch, Porio, Mills, Kovacs, Hutanuwatr, Wahab and Salamanca
- **Theme 2 - Characterization of hazards** – cyclones-typhoons – wind and precipitation; flooding – riverine and coastal; sea level rise – theme leaders: Stewart and Perez with Simonovic, Whitfield, Snidvongs, Mortsch, Trisirisatayawong and Vicente

- **Theme 3 - Understanding decision making** in governance and society – political, economic, social factors - theme leaders: Burton and Loyzaga with McBean, Snidvongs, Adelekan, Mills and Marome
- **Theme 4 - City System Dynamics Risk Simulator** – theme leaders: Simonovic, Davies, Lannigan, Snidvongs, Wahab, Marome, and Vicente



- **Theme 5 - Response strategies leading to Knowledge-based Actions** - theme leaders: Snidvongs, McBean and all the team.
- **Theme 6 - Knowledge Transfer and Capacity Building**– theme leaders: McBean, Snidvongs, Harford, and all the team.
- Large coastal cities on river deltas
- Vancouver, Bangkok, Manila, Lagos
- $2.5m over 5 years